AMENDMENTS TO THE CLAIMS

Claims 1-6 are currently pending in the application. Claim 1 is an independent claim and claims 2-6 depend there from. Claims 1 and 3 are currently amended. Claims 4 and 5 are cancelled.

1. (Currently Amended)   A method for performing quantitative stress echo ultrasound comprising:

acquiring ultrasound signal data;

estimating and storing an at least one tissue deformation value using the ultrasound signal data for a heart wall tissue segment of a patient over a cardiac interval during each of at least two stress periods, where a level of stress on the patient is different for each of said at least two stress periods; and

simultaneously displaying the estimated ~~strain rates~~ at least one tissue deformation value for each of said at least two stress periods as a function of time over the cardiac interval,

wherein the step of estimating the at least one tissue deformation value comprises estimating at least one of:

at least one strain rate, and

at least one strain accumulated over the cardiac interval.

2. (Original) The method according to claim 1 wherein the cardiac interval corresponds to an R to R interval of the cardiac cycle.

3. (Currently Amended)   The method according to claim 1 wherein the display of ~~strain rates~~ the estimated at least one tissue deformation value for at least one of said at least two stress periods is time scaled such that the length of the cardiac interval during each of said at least two stress periods appears to be equal in length.

4. (Cancelled) ~~The method according to claim 1 wherein the tissue deformation value is strain rate.~~

5. (Cancelled) ~~The method according to claim 1 wherein the tissue deformation value is strain accumulated over said cardiac interval.~~

6. (Original)   The method according to claim 1 wherein the at least two stress periods comprises three stress periods.